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MANAGING the CHANGING ENVIRONMENT

SPEECH BY

Dr. Walter R. Trost, CHAIRMAN

ENVIRONMENT CONSERVATION AUTHORITY

Presented to, 1973 Annual Convention of the
ALBERTA SOCIETY of PETROLEUM GEOLOGISTS

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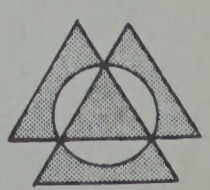

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Speech by

Dr. W. R. Trost, Chairman,
Environment Conservation Authority.

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The 1973 Annual Convention of
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MANAGING THE CHANGING ENVIRONMENT

1. The Province of Alberta

Canada is a fantastic country with endless variations in its environment. Its population is concentrated in many densely packed centres separated by immense empty or sparsely settled areas. Alberta is like the country. Moving from the east to the west the flat and rolling plains of the Province give way to the beauty of the undulating foothills and then to the grand staggering vertical upthrusts of the Rocky Mountains where the rivers rise. From the south to the north, hot arid near-desert country transforms to great reaches of ranch country, then to fertile farmlands and green fields, which in turn are displaced by the limitless expanses of lake and forest country in the middle and northern parts of the Province, until finally in the north where the rivers flow to the Arctic the boundary of permafrost country is reached. Each of these great regions displays its own mix of living species, has its own productivities, problems and possibilities. Of the ten cities, two have half a million people each.

The surface of all of the Province outside the cities is extensively used, for agriculture, for forestry, for recreation. And below the surface, throughout the Province, seam upon seam of coal is found, oil, gas, tar sands and other minerals.

Environmental problems arise when the several species and individuals attempt to make use of the various surface and subsurface resources in ways that are not compatible with each other.

2. The Environment Conservation Authority

To help it deal with the problems of the environment in the Province, the Government of Alberta established the Environment Conservation Authority in 1970 as a Crown corporation to develop an overview of environmental matters. It was to develop public participation, encourage co-ordination among departments of government, and give advice to the Lieutenant Governor in Council on policy and legislation relating to the environment.

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3. The Department of the Environment

Partly as the result of the advice of the Environment Conservation Authority, the Government of Alberta next established a Department of the Environment to administer environmental programs and to co-ordinate programs that also involve other departments of government. The Department is now fully established and functions well. These two structures, the Authority on the one hand and the Department on the other, enable the Government to develop, co-ordinate and administer environmental legislation and programs through the Department of the Environment, and to relate to all sectors of the public in formulating policy through the Authority. Though the Authority has an arm's length relationship to government, both the Environment Conservation Authority and the Department report to the Minister of the Environment. You will permit me to say that the Authority and the Department were established in Alberta before similar structures appeared in any other part of Canada.

4. Public Participation

Five broad areas need major emphasis in dealing with environmental problems. There is first of all a well developed and continuing emphasis on the role and significance that public participation can have in policy formulation in matters relating to the environment. In Alberta, this is done under the auspices of the Environment Conservation Authority which with the co-operation of the departments of government, the universities and industry, makes information available to the public, and holds public hearings on all important matters relating to the environment. The Authority has also established a system of public advisory committees on the environment, some of them large standing committees, others appointed on an ad hoc basis for particular purposes. The Authority also has established a science advisory committee with membership from the universities and from industry so that what might be called a two-level approach can be used, first at the scientific level and then at the more general level when difficult technical problems are involved in matters relating to the environment. The policy and advice so developed is given wide public circulation and is presented to the Cabinet through the Minister of the Environment. Gaps exist in the three-cornered relationship between public needs and desires, technological feasibility, and the pragmatism of politics. The Authority may be a device by which the sides of the triangle can be considerably shortened.

5. Environmental Management

A second major emphasis needs to be on environmental management. In Alberta the environmental management of the major resource industries, and of multiple resource management in regions where many different resources co-exist, has been given a considerable emphasis. The Environment Conservation Authority is in the process of holding comprehensive and wide-ranging enquiries through public hearings at the request of the Government into the impact on the environment of coal, oil, gas and forest developments in the Province, as well as enquiries through public hearings into the integrated development of water-shed regions like the Canmore Corridor, and the whole of the Eastern Slopes, as well as industrial zones in urban centres. It is clear that environmental management will produce many new jobs and afford new opportunities for new businesses to be founded. Since much of the resources are exported, the result will be an increase in employment and the retention within the Province of a greater portion of the resource dollar. This is, of course, significant to the economy of the Province. In more general terms the requirements of environment conservation will create a whole new category of employment possibilities for the future, as we complete the cycle of what has up till now been the half circle wherein we produce goods that are used and then discarded. In completing the cycle, these manufactured materials will be used again and then re-used until they are finally returned into the environment in a conformable fashion. Perhaps as many new jobs will be created in closing the cycle as had been generated in opening up the first half.

6. Environmental Economics

A third emphasis should be on environmental economics. Man must both maintain his own livelihood and protect his future. He must maintain a society that functions well and still not imperil his own well-being nor the survival of other living species. Economic analysis of environmental management, including the processes that disturb the environment as well as the disturbances themselves, is an excellent instrument to sharpen up judgement and focus attention on matters of great relevancy. In its essence, environment conservation is an attempt to retain suitable surroundings for living processes, human and non-human, now and for the future. In the economics of living processes, economics and human ecology do not yet combine simply to give easy answers, but that is where the problems are, and where much attention in Alberta is being directed.

6. Environmental Economics (continued)

There are pressures in society that can lead to a deterioration of the environment. There is also a human dynamic to improve the condition of man, both as an individual and for society as a whole. The objective is obvious. We must search for the balance that adequately protects the environment and at the same time permits and encourages the further evolution of contemporary society.

7. Environmental Education

A fourth requirement is for environmental education. The readaptions that man must make now that he has so densely occupied the surface of the earth, require education inputs to give him the skills and the new attitudes that these new circumstances demand. Environmental education is required, both within the school system at all levels from elementary to university, and outside the formal educational structure, in industry, in government, and in the public at large. In Alberta new programs are being developed in the elementary, secondary and post-secondary institutions and in the institutes of technology to provide the understandings and skills that are needed for sound environmental management in the context of the Province.

8. Environmental Legislation

The final theme I wish to emphasize is environmental legislation. Environmental legislation includes the legislation itself, the regulations that amplify and define the legislation, and the enforcement procedures that follow. In Alberta much interesting and innovative legislation has been passed and is now in the process of being transformed and tested through regulation and enforcement. The Acts establishing the Environment Conservation Authority in 1970 and the Department of the Environment in 1971 were accompanied by The Wilderness Areas Act and The Clean Air and Clean Water Acts and similar suitable legislation. Additional legislation is being put forth this year, including legislation relating to surface reclamation associated with surface mining and other matters relating to resource industries. The Province is also forming up new legislation to protect, conserve

8. Environmental Legislation (continued)

and make suitable use of its historical and archaeological resources. New world archaeology is perhaps as far advanced in Alberta as in any part of Canada, and the conservation of these historical resources is a subject of great interest in the Province. The plains against the eastern Rockies were a migration route for people for many thousands of years following and perhaps between the latest ice ages.

Land Use and Resource Development in the Eastern Slopes.

You will, I think, be interested in an application of these five themes to a specific case.

The Government of Alberta has requested the Environment Conservation Authority to hold comprehensive and wide ranging hearings on Land Use and Resource Development in the Eastern Slopes of the Rocky Mountains and the Foothills Areas of Alberta.

Goegraphical Area

For the purpose of the hearings, the Eastern Slopes are defined as the total mountain and foothills areas in the Province from its western and north-western borders with British Columbia and its southern border with Montana to the eastern limits of the foothills but not including the National Parks and Indian Reservations.

Types of Land Use in the Eastern Slopes

Land is now used in the Eastern Slopes or is proposed for use for such purposes as tourism, summer and winter recreation, urban development, forest utilization, mineral resource industries, surface mining, oil and gas development, underground coal mining, agriculture, watershed conservation, domestic water supplies, hydroelectric power developments, wildlife and fishery management, wilderness and natural areas, institutional use (charitable and religious groups), archaeological sites, research, etc. It is to be recognized that Indian Reservations and National Parks exist in this geographical area.

The Integration of the Five Themes

The Eastern Slopes present an area of about 40,000 square miles with great contrasts and conflicts not only between alternate surface uses, but as between

surface and sub-surface demands. They present a fascinating, and in a sense, a precedent-setting opportunity to try to put the five themes I have been stressing together in the best possible way. May I repeat the five themes: Public Participation, Environmental Management, Environmental Economics, Environmental Education and Environmental Legislation.

Submissions on Integrated Land Use and Resource Development in the Eastern Slopes

The different present and potential uses of resources within the Eastern Slopes area may either have no effect on each other, complement each other, conflict with each other, or relate to each other in sequential ways.

Submissions on the different land uses and how the several uses might affect each other are invited from all sectors of the public including developers, industry, regional planning commissions, cities, municipalities, towns and improvement districts, Indian Bands, universities and other agencies, associations, groups and individuals.

Submissions on land use and resource developments such as forest utilization, mineral resource developments, surface mining, oil and gas exploration, tourism, summer and winter recreation, wildlife and fishing management, urban development and any other type of land use considered appropriate, are to be expected.

In addition, submissions are to be anticipated on the impact of developments in associated National Parks and Indian Reservations on activities outside these areas, but within the Eastern Slopes.

Submissions for specific recreational and tourist development projects in the area made in the first instance to the Department of Lands and Forests, will also be reviewed at the hearings.

The Hearings

For the purpose of the hearings the Eastern Slopes will be divided into five separate districts corresponding to the five major watershed basins and outlined by the statutory boundaries of the four Regional Planning Areas and Improvement District No. 14, as shown on the slides.

The Eastern boundary of the area corresponds with the Eastern edges of the foothills and is prescribed by an arc lying to the west of the cities of Lethbridge, Calgary, Red Deer, Edmonton and Grande Prairie.

Each district is identified with the name of its watershed and is associated with a regional planning area as follows:

Watersheds	Planning Authorities
1. Old Man River Basin	Old Man River Regional Planning Commission
2. Bow River Basin	Calgary Regional Planning Commission
3. North Saskatchewan River Basin	Red Deer Regional Planning Commission
4. Athabasca River Basin	Provincial Planning Authority
5. Smoky River Basin	Peace River Regional Planning Commission

1. The Eastern Slopes

Submissions will be received on land use and resource development in the Eastern Slopes as a whole or in any part of them. For this purpose the reports of the Foothills Resource Allocation Study Group will be made available to the public.

The Information Base

A series of Information Bulletins are being prepared, to provide a suitable information tool for the presentation of submissions and opinions to the enquiry. The District Planning Commissions and the Foothills Resource Allocations Task Force will work with the Authority to provide this information.

The first Bulletin gives general information about the Hearings.

The second gives general information about the Eastern Slopes.

Then, for each major district or watershed basin, two information bulletins will be provided. One will give land use and resource data compiled by a Provincial Task Force on the Eastern Slopes as a whole. The other will consist of a planning report prepared by the appropriate District Planning Commission. Submissions from the public will be received at any time up to the dates of the hearings themselves, which are yet to be finally announced. In all, ten Information Bulletins will be circulated at least two months prior to the Hearings.

2. Recreation and Tourism

In addition to the general hearings, time will be separately scheduled at the hearings to receive proposals for specific commercial recreation and tourism projects.

These will be specific proposals advanced by private commercial interests for projects designed to promote recreation and tourism within the area.

Such proposals are submitted to the Director of Lands before February 28, 1973, who in turn will pass them over to the Authority to be made available to the public prior to the hearings. Comments and briefs concerning them can then be presented at the hearings on them. Submissions from the public will be received up to the dates of the hearings, which are not yet announced.

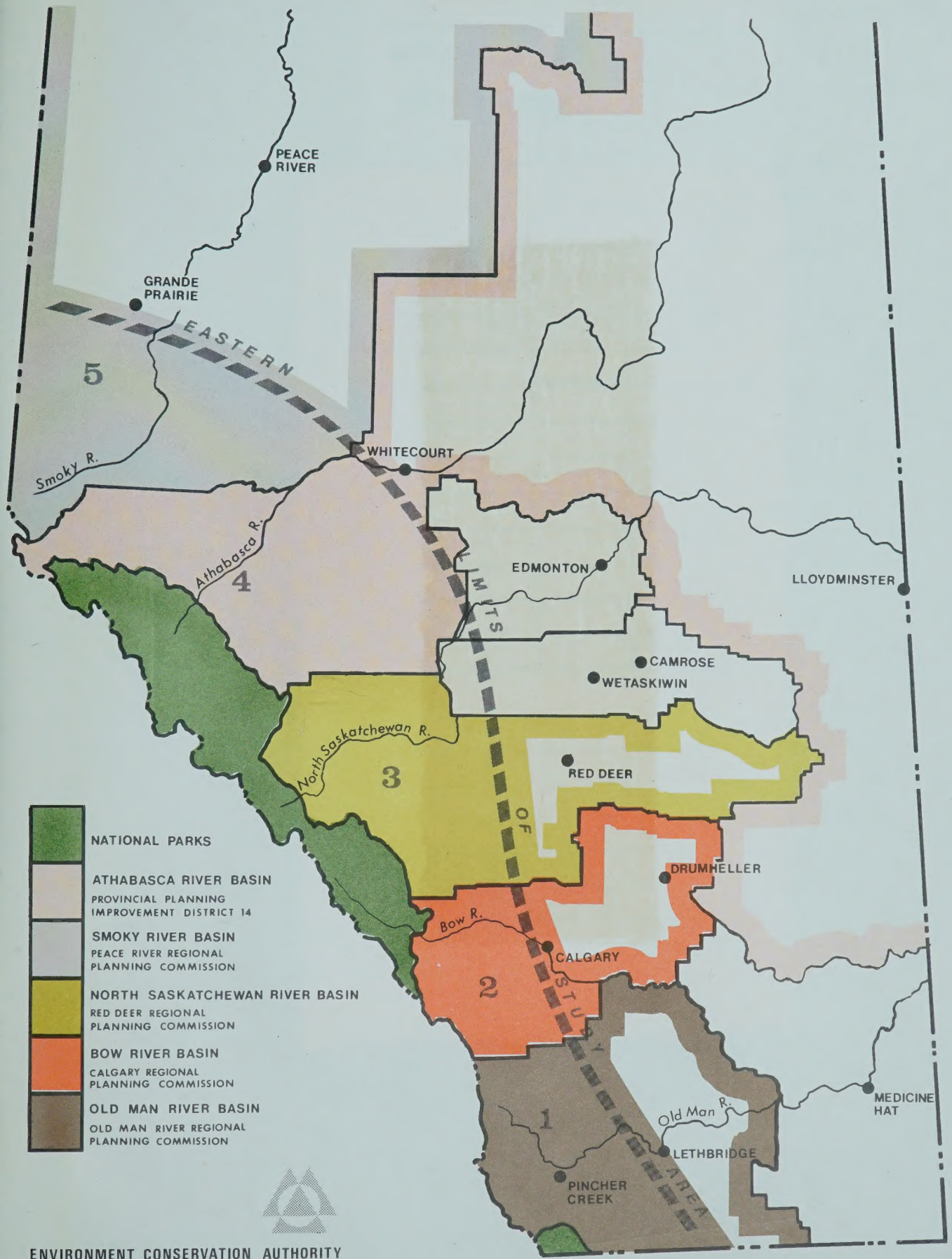
Objectives of the Hearings

Through public hearings to enquire into all potential uses and to formulate ways in which optimum benefits and environment conservation can be achieved now and for the future from the various resources of the eastern slopes. To consider and evaluate the views of the public on specific recreational and tourist development proposals for the area. To lay the views presented to the Authority and the Authority's recommendations thereon before the Government of Alberta.

Conclusion

Our hope is that this may be one step in a sensible process leading to sound management for the changing environment affecting the Eastern Slopes, and serve as a guide for other regions in the Province and in Canada as a whole.

Thank you for giving me this opportunity to talk to you on the subject of Managing our Changing Environment.



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